

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
10 June 2004 (10.06.2004)

PCT

(10) International Publication Number
WO 2004/049502 A1

(51) International Patent Classification⁷: H01Q 1/24, H04B 1/38, H04M 1/02

(21) International Application Number: PCT/EP2003/013001

(22) International Filing Date: 20 November 2003 (20.11.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

02026232.5	26 November 2002 (26.11.2002)	EP
60/431,505	4 December 2002 (04.12.2002)	US

(71) Applicant (for all designated States except US): SONY ERICSSON MOBILE COMMUNICATIONS AB [SE/SE]; S-221 88 Lund (SE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): LINDELL, Bo [SE/SE]; Mjölnarstigen 4, S-181 46 Lidingö (SE).

(74) Agent: DAHNÉR, Christer; Ström & Gulliksson IP AB, P.O. Box 7086, S-103 87 Stockholm (SE).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,

[Continued on next page]

(54) Title: ANTENNA FOR PORTABLE COMMUNICATION DEVICE EQUIPPED WITH A HINGE

(57) Abstract: The present invention relates to a portable communication device and an antenna arrangement for a portable communication device. The portable communication device comprises a first part comprising a first antenna element (22) located within and extending through a major portion of the first part and a radio circuit (30) feeding antenna elements in the device, a second part hingedly joined to an end of the first part for providing at least one open and one closed position of the phone, and a hinge element connected to the first and second parts, stretching along the end of the first part for providing rotation of one part in relation to the other part around a first axis (32) and having a first (17) and second end, said hinge element comprising a second antenna element (24), wherein the radio circuit is connected between the first and second antenna elements for feeding them.

